

A NEW SPECIES OF *PROTEA* IN THE TRANSVAAL

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ABSTRACT

A new species of *Protea*, *P. laetans* from the Eastern Transvaal is described and illustrated.

UITTREKSEL

'N NUWE *PROTEA*-SOORT IN TRANSVAAL

'n Nuwe *Protea*-soort, *P. laetans* wat in die Oos-Transvaal voorkom word beskryf en geïllustreer.

Protea laetans L. E. Davidson, sp. nov. A speciebus affinibus, stipite longo crasso lignoso, bracteis involucralibus perpetuo velutinis, florescentia praecipue autumnali, optime distinguitur.

Arbor tenuis ad 5 m alta. Truncus brevis ad 20 cm diametro. Rami longi adscendentes, foliis distalibus. Cortex griseus in rectangulis fissuratus. Rami juveniles rosei flavescens, mox grisei, glabri, lenticellis albis multis longitudinaliter marmorati. Gemma vegetativa bracteis parvis pubescentibus argenteis imbricatis. *Folia* sessilia 14-19 cm longa 1,5-3,0 cm lata falcatuscula linearia-oblancoolata, apice acuto vel rotundatusculo; lamina coriacea glabra glauca, margine translucens flavescens; costa basi 3 mm lata utrinque conspicua, plerumque rubra ab immo flavescens ad summum, gradatim decrescens ad apicem evanescens; folia basi 90° torta, laminis obliquis, faciem characteristicam producentia. *Inflorescentia* stipitata superne cyathiformis 8-10 cm longa stylis inclusis, 8-10 cm lata, post anthesin conica; stipes lignosus 1,5-2,5 cm longus 1,5-2,0 cm latus; receptaculum planum. *Bractee* 14-17 seriatae carminae ciliatae pubescentes, saepe in margine glabrae; pubescentia argentea vel ferruginea, plerumque argentea cum area media ferruginea; bractee intimae 4,5 cm longae (0,5) 1,0-1,5 cm latae concavae oblongae vel obovatae, apice rotundato; bractee seriei secundae 3,5-4,0 cm longae 1,5-2,0 cm latae ovatae; ceterae late ovatae basim versus decrescens. *Perianthium* 5-6 cm longum, basi albidum, apicem versus rubescens; pagina externa 1,5-2,0 cm basi glabra, tum inter nervos et ad marginem pilis vel pilis sparsis, labium 1,5-1,8 cm longum, pubescentia ferruginea densa; pagina interna 1,5-2,0 cm basi glabra, tum pilis marginalibus, et pilis densis basi antherarum, glabra superne; segmentum

anticum 5 mm latum ad 1 mm decrescens; pars postica (segmenta 2 lateralia 1 posticum conjuncta) 10 mm lata ad 2 mm decrescens. *Antherae* 4 subsessiles 1 cm longae, anthera postica minime brevior; umbo apicalis sagittatus in quoque anthera. *Stylus* ad 5 cm longus, basi 2 mm latus albidus, apicem versus decrescens rubescens et minime geniculatus; pars pollen praebens (stigma inclusa) 1 cm longa filiformis carnea albescens, stylo valde similis, longistrorsum sulcata, apice rotundato. *Fructus* 11 mm longus 4 mm latus, basi ad 2 mm contractus, pilis longis ferrugineis. *Squamae hypogynae* 4 ovatae 1 mm longae.

Slender tree up to 5 m high. *Trunk* short up to 20 cm across with long ascending branches distally leafy. Fire damage causing branching at or near ground level; bark grey splitting into rectangles. *Young branches* pink to yellow soon turning grey, glabrous with longitudinal patterning of abundant white lenticels. *Vegetative bud* with small densely packed silvery pubescent bracts. *Leaves* sessile 14-19 cm long, 1.5-3.0 cm wide, slightly falcate, linear-oblongate, apex acute to slightly rounded; blade leathery, glabrous, grey-green with pale yellow translucent margin; midvein 3 mm wide usually red at base, shading to yellow tapering and disappearing towards leaf apex, conspicuous on both surfaces; blade base twisted through 90° so that leaves are oblique; shape and angle of leaf giving characteristic appearance to tree. *Inflorescence* stipitate, cyathiform above, at anthesis shallowly cyathiform, 8-10 cm long including styles, 8-10 cm across, after anthesis closing to conical; stipe woody, 1.5-2.5 cm long, 1.5-2.0 cm across; receptacle flat. *Bracts* 14-17 seriate, carmine, ciliate, pubescent often with glabrous marginal band, pubescence silvery to ferruginous, usually silver with median area ferruginous; innermost bracts 4.5 cm long, (0.5) 1.0-1.5 cm wide, concave, oblong to obovate, apex rounded; next row 3.5-4.0 cm long, 1.5-2.0 cm wide, ovate, thereafter becoming broadly ovate, decreasing in size towards base. *Perianth* 5.0-6.0 cm long, ivory white at base shading to pink; outer surface glabrous for 1.5-2.0 cm at base becoming sparsely hairy to hairy between veins and on margins, lip 1.5-1.8 cm long with dense ferruginous pubescence; inner surface glabrous for 1.5-2.0 cm at base becoming hairy on margins and densely hairy at base of anthers, glabrous above; single anticus perianth segment 5 mm wide tapering to 1 mm; posticus portion (3 joined segments, 1 posticus, 2 lateral) 10 mm wide tapering to 2 mm. *Anthers* 4, subsessile, 1.0 cm long each with sagittate apical boss, posticus anther fractionally shorter. *Style* up to 5.0 cm long, at base 2 mm across, white, shading to red, tapering, minutely geniculate near apex; pollen presenter (including stigma) 1.0 cm long filiform, scarcely differentiated from style, pale pink to white, longitudinally grooved, rounded at apex. *Fruit* 11 mm long 4 mm wide, tapering to 2 mm at base, covered with long ferruginous hairs. *Hypogynous scales* 4, ovate 1 mm long.

Diagnostic characters: This species is distinguished from related species by its long, stout woody stipe, permanent velutinous pubescence on outer surface of involucral bracts and autumnal flowering peak.

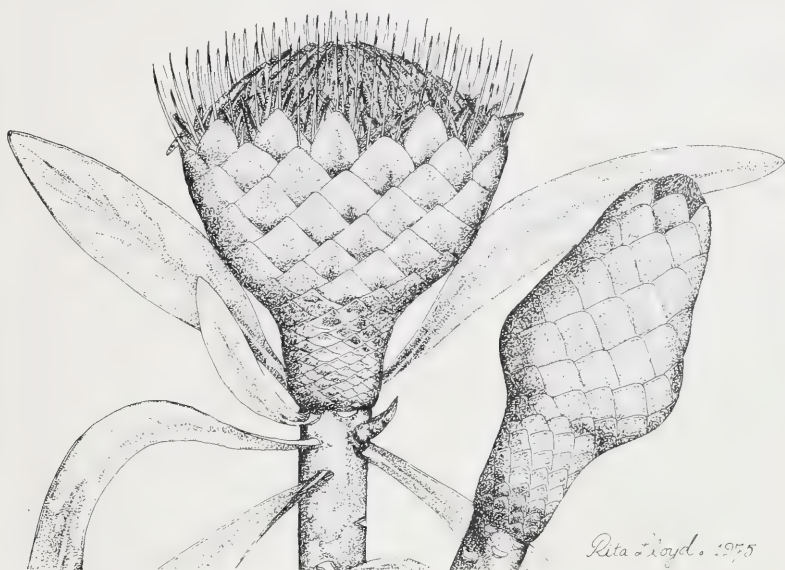


FIG. 1.
Protea laetans. Mature inflorescence and bud. ($\times \frac{1}{2}$)

Type material: TRANSVAAL—2430 (Pilgrims Rest): hillside within Blyde Canyon Reserve at tourist resort (-DB), alt. 1 200 m. 5/5/75. *L. E. Davidson* 2681 (J, holo.; NBG, PRE, K, MO, NU, iso).

Found growing between altitudes of 1 000 and 1 240 metres on a single hillside of Black Reef and Wolkberg quartzites in the Blyde Canyon Reserve at the tourist resort on the Eastern Transvaal Drakensberg. It is abundant on the grassy rocky hillside associated with *Bequaertiodendron magalismontanum*, *Cussonia natalensis* and *Faurea galpinii*. None of the other species of *Protea* which are found in the Blyde Canyon Reserve occurs on this hillside. A few isolated specimens of this species have been found elsewhere in the reserve. There are variations in the dimensions of the leaves and in the pubescence on the bracts which range from completely silvery to completely ferruginous, otherwise this species is remarkably uniform in general characteristics. The flowering period

starts in mid-March, reaches a peak in mid-May and thereafter occasional flowers are to be found until the end of November. It is apparently resistant to fire.

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